UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,592	10/28/2003	Mao-Chi Hung	87159200.002001	9171

23562 7590 04/19/2005

BAKER & MCKENZIE
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

EXAMINER	
LEE, WILSON	
ART UNIT	**PAPER NUMBER**
2821	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No.	Applicant(s)	
	10/695,592	HUNG ET AL.	
	Examiner	Art Unit	
	Wilson Lee	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *1-9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-9* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Remarks

Applicant elects group II of claims 10-21 with traverse.

Since it has been concluded that the pending application includes more than one separate distinctive and independent inventions, the restriction is therefore proper.

Further, burden may also arise from prosecuting multiple inventions in a single application. Such a type prosecution merely leads to complication in patentability determination that may ultimately sacrifices the quality of patentability determination. In view of this reason, a restriction imposed is clearly proper.

The requirement is still deemed proper and is therefore made **FINAL**.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 10-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Weindorf (6,690,121).

Regarding Claim 10, Weindorf discloses a display panel (104) having at least one illumination source (102); and a programmable current controller (140, 108) coupled to the at least one illumination source, wherein the programmable (in memory devices, see Col. 4, lines 19-34) current controller (140, 108) is configured to regulate an operating driving current (through transformer drive 150 and transformer 152) of the at least one illumination source (102) according to a digital reference corresponding to a predetermined reference driving current (commanded lamp current) (See Figure 5).

Regarding Claim 11, Weindorf discloses that the display panel is a liquid crystal display panel (See Col. 3, line 51 to Col. 4, line 10).

Regarding Claim 12, Weindorf discloses that the programmable current controller comprises:

a programmable interface configured to program the digital reference in a memory (memory devices in Col. 4, line 19-35);

a digital-to-analog converter (See Col. 5, lines 14-45) coupled to the programmable interface and configured to convert the digital reference into a first electrical parameter (analog),

a comparator (124) coupled to the programmable interface and configured to compare the first electrical parameter (commanded lamp current) with a second electrical parameter (sensed signal from sensor 114) corresponding to the operating

driving current of the one illumination source (20), and generate a driving bias current; and

a current regulator (126) coupled to the comparator and configured to regulate the operating driving current of the illumination source (20) according to the driving bias current, wherein the driving bias current corresponds to a difference between the first and second electrical parameters (See Col. 5, line 63 to Col. 6, line 19).

Regarding Claim 13, Weindorf discloses that the programmable current controller further comprising: a sensor (114) coupled to the one illumination source (20) and configured to measure the second electrical parameter (See Figures 3, 5).

Regarding Claim 14, Weindorf discloses that the sensor (114) is a resistor (See Col. 4, 44-45).

Regarding Claim 15, Weindorf discloses a method of regulating an operating driving current for one illumination source (102) of a display system comprising:

measuring a first electrical parameter (from sensor 114) corresponding to the operating driving current of the at least one illumination source (102);

converting a digital reference (See Col. 5, lines 14-45) into a second electrical parameter (analog voltage from desired brightness signal), wherein the digital reference corresponds to a predetermined driving current for the one illumination source (102);

comparing the first electrical parameter with the second electrical parameter;

based on the comparison (in the driver calculator 124, see col. 5, lines 14-45), generating a driving bias current; and

regulating the operating driving current of the at least one illumination source (102) according to the driving bias current.

Regarding Claims 16 and 17, Weindorf discloses (See Figure 3) that

the first electrical parameter (from sensor 114) is a feedback voltage/current (voltage and current inherently exist together) corresponding to the operating driving current of the illumination source (102); and

the second electrical parameter (from brightness signal) is a voltage/current corresponding to the predetermined driving current for the illumination source (102).

Regarding Claim 18, Weindorf discloses that the digital reference is stored in a memory (See Col. 4, lines 19-34).

Regarding Claim 19, Weindorf discloses that the driving bias current corresponds

to a difference between the first and second electrical parameters (See Col. 5, line 63 to Col. 6, line 18, Claims 2 and 7 of Weindorf).

Regarding Claim 20, Weindorf discloses that the display system is a liquid crystal display system (See Col. 3, line 51 to Col. 4, line 2).

Regarding Claim 21, Weindorf discloses that the illumination source includes at least one light-emitting diode (See Col. 4,lines 1-9).

Conclusion

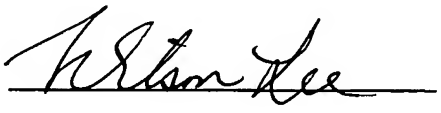
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim et al. (6,265,833) discloses an apparatus for driving self-emitting display device.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

4/18/05